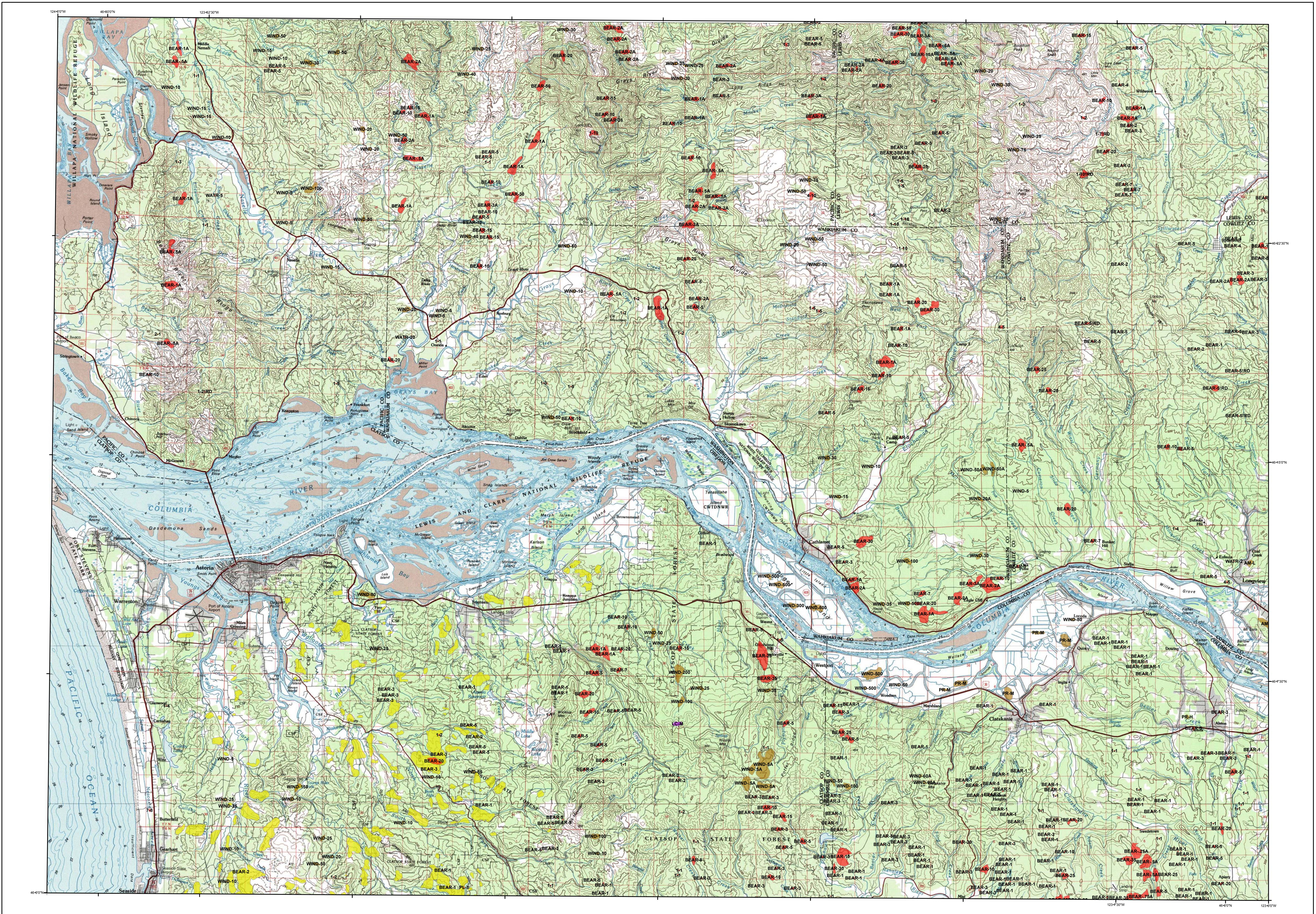


2007 Aerial Insect and Disease Survey

USGS 100K Quad: Astoria - A146123; 2F



Defoliators	
Code	Damaging Agent
AS	Spruce aphid
BB	Western blackheaded budworm
BM	Modio budworm
BY	Sugar pine tortrix
BS	Western spruce budworm
CH	Byrrhus blight/Lophododendrus
HL	Western hemlock looper
LG	Green striped forest looper
LL	Larch looper
LS	Black pine needle scale
MD	Douglas-fir budmoth
ML	Larch budmoth
ND	Douglas-fir needle midge
NJ	Spruce budmoth
NI	Needle miner
NK	Needle miner
NL	Needle miner
NP	Needle miner
NS	Needle miner
NT	Needle miner
NW	Needle miner
PI	Pine butterfly
PC	Pine needle cast
PM	Phantom hemlock looper
PN	Pandora moth
PS	Pine needle scale
RC	Pine needle scale
S	Spruce sawfly
SD	Sawfly
SE	Sawfly
SK	Sawfly
SL	Sawfly
SM	Sawfly
SNC	Swiss needle cast
SP	Sawfly
TA	Tent caterpillar, aspen
TC	Tent caterpillar, other
TM	Douglas-fir tussock moth
TS	Tent caterpillar, aspen

USGS 100K Quad: Astoria - A146123; 2F

2007 Aerial Insect and Disease Detection Survey

Mapscale: 1:100,000

Date: November 23, 2007

Legend

2007 Special Swiss Needle Cast Survey

Defoliating Agents

Mortality Agents

Other Damage

More information about this special survey and the related data is located under 'Maps and Data' at: <http://www.odf.state.or.us/pcpf/>

A data dictionary, digital copies of this map and Arcgis insect and disease data are available at: www.fed.us/r6/nr/rid/data.shtml

The map base was created with TOPOI (Copyright 2001, National Geographic); available online at: www.ngmapstore.com

A data dictionary, digital copies of this map and Arcgis insect and disease data are available at: www.fed.us/r6/nr/rid/data.shtml

How the Aerial Surveys are Conducted

Data represented on this map are based on trees visibly affected by forest insects and diseases detected and recorded during aerial survey flights conducted by the USDA Forest Service, the Washington Department of Natural Resources and the Oregon Department of Forestry. Observers have just a few seconds to recognize the color difference between healthy and damaged trees of different species; diagnose causal agents correctly; estimate intensity; delineate the extent of damage; and precisely record this information on a georeferenced, digital map. Air turbulence, cloud shadows, distance from aircraft, haze, smoke and observer experience can all affect the quality of the survey. These data summaries provide an estimate of conditions on the ground and may differ from estimates derived by other methods.

The aerial survey provides information on the current status for many causal agents, and is important when examining insect activity trends by comparing historical and current survey data over large areas.

Overview surveys are a 'snap shot' in time and therefore may not be timed to accurately capture the true extent or severity of a particular disturbance activity. Specially designed surveys with modified flight patterns and timing may be conducted to more accurately delineate the extent and severity of a particular disturbance agent. Special surveys, such as Swiss needle cast surveys, are conducted when resources are available to address situations of sufficient economic, political or environmental importance.

DIRECT ALL INQUIRIES TO:

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Resource Protection
Forest Health
1111 Washington St. SE
Olympia, WA 98504

-- OR --

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USDA Forest Service, Region 6
Natural Resources
Forest Health Protection
PO Box 3623
Portland, Oregon 97208

****DISCLAIMER****

The insect and disease data presented should only be used as an indicator of insect and disease activity, and should be ground-checked for precise location, extent, severity and causal agent.

Color coded polygons show locations where trees were recently killed or defoliated. Intensity of damage is variable and not all trees within coded polygons are dead or defoliated.

The cooperators reserve the right to correct, update, modify or replace GIS products without notice. Using this map for purposes other than those for which it was intended may yield inaccurate or misleading results.